

Add the following new claims 4-10:

¹4. An apparatus for chemically and mechanically planarizing a surface of a workpiece comprising:

a non-cellular lapping surface;

workpiece mounting means for mounting said workpiece to expose said workpiece surface to said lapping surface;

an abrasive slurry disposed between said workpiece surface and said lapping surface; and

means for relatively moving said lapping surface and said workpiece mounting means such that said workpiece surface is contacted and planarized by said lapping surface.

²5. An apparatus as claimed in claim ¹4, wherein said lapping surface is made from a soft and pliable material that conforms to integrated circuit device layers formed on said workpiece surface and resists damage to said integrated circuit device layers.

³6. An apparatus as claimed in claim ²5, wherein said lapping surface is made from fused polyethylene, flexibilized epoxy or non-cellular urethane.

⁴7. An apparatus as claimed in claim ¹4, wherein said abrasive slurry comprises:
about 5-20% by weight of a chemical agent having a particle size of about 10-200 nanometers and being selected from a group consisting of a hydroxide and potassium fluoride; and
a mechanical agent selected from a group consisting of colloidal silica, cerium oxide and alumina.

⁵8. An apparatus as claimed in claim ⁴7, wherein said abrasive slurry comprises about 11% by weight of said chemical agent and said particle size is about 30-80 nanometers.